

**Notice of Allowability**

Application No.

10/773,851

Examiner

Pedro J. Cuevas

Applicant(s)

MIKHAIL ET AL.

Art Unit

2834

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on December 9, 2005.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 16-26, filed on December 9, 2005, with respect to claims 1-36 have been fully considered and are persuasive. The rejection of claims 1-34 has been withdrawn.

### ***Allowable Subject Matter***

2. Claims 1-36 are allowed.

### ***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance.

The prior art of record, taken alone or in combination, does not teaches:

the construction of an electric power-generating device as described on independent claims 1 and 21, comprising:

a synchronous generator selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators, said synchronous generator being operatively connected to said main input shaft, an output of said synchronous generator being AC electrical power;

the construction of a fluid-flow turbine as described on independent claims 16 and 25, comprising:

a plurality of synchronous generators selected from the group consisting of wound field synchronous generators wherein an exciter field is excited with a

constant current and permanent magnet synchronous generators, said synchronous generators being operatively connected to said blade for converting said mechanical power into fixed-frequency utility-connected AC electrical power;

the construction of a fluid flow farm as described on independent claims 19 and 24, comprising:

a plurality of fluid flow turbines each of which includes a synchronous generator coupled to a rectifier and an inverter, an output of said inverter being connected to a transformer, wherein reactive power control is fixed at said output of said inverter so that power factor is unity or set to provide a leading power factor that compensates for VAR of said transformer;

the construction of a fluid-flow farm as described on independent claim 20, comprising:

a plurality of fluid-flow turbines each of which includes one or more synchronous generators, each coupled to a rectifier and an inverter, an output of said inverter being connected to a transformer, wherein VAR control is fixed at said output of said inverter such that a VAR load is set between a leading power factor to compensate for the VAR of said external transformer and unity power factor, inclusive, and

each one of said fluid-flow turbines comprising a blade which converts fluid-flow power into mechanical power, said one or more synchronous

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generators being selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators, said synchronous generators being operatively connected to said blade;

the design of a method of generating electric power as described on independent claim 28, comprising the step of:

utilizing a plurality of generators selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators to convert said mechanical power into electrical power;

the design of a method of generating electric power as described on independent claim 31, comprising the step of:

providing a plurality of fluid-flow turbines that include synchronous generators selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators, said generators converting fluid-flow power into AC electrical power at a power factor fixed between a leading power factor to compensate for the VAR of an external transformer and a unity power factor, inclusive;

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the design of a method of generating electric power as described on independent claim 32, comprising the step of:

providing a plurality of fluid-flow turbines, each of which utilizing a blade to drive synchronous generators selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators, said generators converting fluid-flow power into AC electrical power at unity power factor;

the construction of a variable speed wind turbine as described on independent claim 35, comprising:

a synchronous generator selected from a group consisting of wound field synchronous generators wherein an exciter field is excited with a constant current and permanent magnet synchronous generators.

Dependent claims 2-15, 17-18, 22-23, 26-27, 29-30, 33-34, and 36 are considered allowable by their respective dependence on allowed independent claims 1, 16, 19-21, 24-25, 28, 31-32, and 35.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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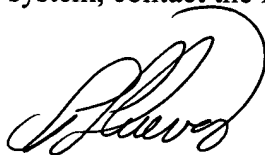
***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

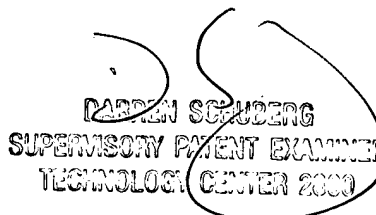
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pedro J. Cuevas  
December 15, 2005



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